



SEQUENCE LISTING

<110> Audonnet, Jean-Christophe

<120> Improved DNA Vaccines for Farm Animals, In particular bovines and procines

<130> 454313-3154.2

<140> 09/766,442

<141> 2001-01-16

<160> 106

<170> PatentIn version 3.0

<210> 1

<211> 40

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used to prepare modified plasmid pVR1020

<400> 1

gatctgcagc acgtgtctag aggatatcga attcgcgcc

40

<210> 2

<211> 40

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used to prepare modified plasmid pVR1020

<400> 2

gatccgcggc cgcgaattcg atatcctcta gacacgtgct

40

<210> 3

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used to prepare plasmid pNS050

<400> 3

ttggggaccc ttgattgttc

20

<210> 4

<211> 21

<212> DNA

<213> Artificial sequence

09766442.000001

<210> 9
 <211> 51
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used to prepare fragment for generating plasmid p
 PB28

 <400> 9
 ctgcacgagc tccggttcta cgacattgac cgctgggtcaa gacggactga g 51

 <210> 10
 <211> 56
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used to prepare fragment for generating plasmid p
 PB28

 <400> 10
 gatcctcagt ccgtcttgac cacgcgggtca atgtcgtaga accggagctc gtgcag 56

 <210> 11
 <211> 39
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> primer used in amplification of modified form of BHV-1 gB gene

 <400> 11
 aaaatttcga tatccgccgc ggggcgaccg gcgacaacg 39

 <210> 12
 <211> 33
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> primer used in amplification of modified form of BHV-1 gB gene

 <400> 12
 ggaagatctt cagtccgtct tgaccacgcg gtc 33

 <210> 13
 <211> 37
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used in ligation of 1492bp fragment from plasmid

T03030"2449260

pPB28

<400> 13
tcgtgcctgc ggcgcaaggc ccgggcgcgc ctgtagt 37

<210> 14
<211> 37
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in ligation of 1492bp fragment from plasmid
pPB28

<400> 14
ctagactaca ggcgcgcccg ggccttgccg cgcaggc 37

<210> 15
<211> 43
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used to prepare truncated form of BHV-1 gC gene

<400> 15
gcaccgctgc ccgagttctc cgcgaccgcc acgtacgact agt 43

<210> 16
<211> 43
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used to prepare truncated form of BHV-1 gC gene

<400> 16
ctagactagt cgtacgtggc ggtcgcggag aactcgggca gcg 43

<210> 17
<211> 39
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in amplification of modified form of BHV-1 gC gene

<400> 17
aaaatttcga tatcccggcg ggggctcgcc gaggaggcg 39

<210> 18
<211> 32

TOPSECRET-000000

<212> DNA
 <213> Artificial sequence

 <220>
 <223> primer used in amplification of modified form of BHV-1 gC gene

 <400> 18
 ggaagatctc tagtcgtacg tggcggtcgc gg 32

<210> 19
 <211> 33
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> primer used to amplify truncated gD gene of BHV-1

 <400> 19
 tttctgcaga tgcaagggcc gacattggcc gtg 33

<210> 20
 <211> 31
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> primer used to amplify truncated gD gene of BHV-1

 <400> 20
 tttctagatt agggcgtagc gggggcgggc g 31

<210> 21
 <211> 39
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> primer used to amplify modified form of BHV-1 gD gene

 <400> 21
 aaaatttcga tatccccgc gccgcgggtg acggtatac 39

<210> 22
 <211> 33
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> primer used to prepare modified form of BHV-1 gD gene

 <400> 22
 ggaagatctt tagggcgtag cggggcgggg cgg 33

090644 090901
 100000 2449260

<223> primer used to amplify G gene of the BRSV Snook strain

<400> 27

acgcgtcgac atgtccaacc atacccatca tc

32

<210> 28

<211> 38

<212> DNA

<213> Artificial sequence

<220>

<223> primer used to amplify G gene

<400> 28

ttaaaatcta gattagatct gtgtagttga ttgatttg

38

<210> 29

<211> 33

<212> DNA

<213> Artificial sequence

<220>

<223> primer used to amplify truncated form of G gene

<400> 29

ttttaaggat ccgctaaagc caagcccaca tcc

33

<210> 30

<211> 33

<212> DNA

<213> Artificial sequence

<220>

<223> primer used to amplify truncated form of G gene

<400> 30

ttaaaatcta gattagatct gtgtagttga ttg

33

<210> 31

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used to amplify cDNA of EO gene

<400> 31

cataccgtcg acatgaagaa actagagaaa gccctg

36

<210> 32

<211> 40

<212> DNA

0376544-000001

<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of cDNA of EO gene of the O
sloss strai

<400> 32

cataccggat cctcaggctg catatgcccc aaaccatgtc 40

<210> 33

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in synthesis of EO gene

<400> 33

catgacgcgg ccgctatgaa gaaactagag aaagccctg 39

<210> 34

<211> 40

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in synthesis of EO gene

<400> 34

catgacagat ctttaggctg catatgcccc aaaccatgtc 40

<210> 35

<211> 33

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of E2 gene

<400> 35

catgacgtcg acatgacgac tactgcattc ctg 33

<210> 36

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of E2 gene

<400> 36

09644-00001
"249260"

catgacagat cttcaacgtc cegaggtcat ttgttc

36

<210> 37

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the E2 gene

<400> 37

catgacgcgg ccgctatgac gactactgca ttcttg

36

<210> 38

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the E2 gene

<400> 38

catgacagat ctcaagcgaa gtaatcccgg tgggtg

35

<210> 39

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of E2 gene

<400> 39

actgtatcta gaatgaccac cacagctttc ctaatc

36

<210> 40

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of E2

<400> 40

actgtaagat ctttaagtat tcaactccagc acccatagc

39

<210> 41

<211> 41

<212> DNA

<213> Artificial sequence

<220>

0376644-030301

<223> oligonucleotide used in synthesis of E2 gene

<400> 41

catgacgcgg ccgcctatg accaccacag ctttccta c

41

<210> 42

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in synthesis of E2 gene

<400> 42

catgacagat ctttatatga actctgagaa gtagtc

36

<210> 43

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of the cDNA of the E0 gene

<400> 43

cataccgtcg acatgagaaa gaaattggag aaggcactg

39

<210> 44

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of the cDNA of the E0 gene

<400> 44

cataccggat cctcatgctg catgagcacc aaaccatgc

39

<210> 45

<211> 42

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the E0 gene

<400> 45

catgacgcgg ccgctatgag aaagaaattg gagaaggcac tg

42

<210> 46

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the EO gene

<400> 46

cataccagat cttcatgctg catgagcacc aaaccatgc

39

<210> 47

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of cDNA of HN gene

<400> 47

catatcgctcg acatggaata ttggaaacac acaaacagc

39

<210> 48

<211> 38

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of cDNA of HN gene

<400> 48

catgacgata tctagctgca gtttttcgga acttctgt

38

<210> 49

<211> 33

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the HN gene

<400> 49

catactgcgg ccgctttaat tcaagagaac aat

33

<210> 50

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the HN gene

<400> 50

catatcgata tctagctgca gtttttcgga acttc

35

TTGGAAACAC ACAAACAGC

<210> 51
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of cDNA of the F gene

<400> 51
catatcgctcg acatgatcat cacaaacaca atcata 36

<210> 52
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of cDNA of the F gene

<400> 52
catgaccaga tcttattgtc tatttgtcag tatata 36

<210> 53
<211> 42
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the synthesis of the F gene

<400> 53
catactgcgg ccgctcaa at agacataaca aaactgcaac gt 42

<210> 54
<211> 41
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the synthesis of the F gene

<400> 54
catatcgata tctatgcact agattgatac caacttccaa c 41

<210> 55
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in the amplification of the gB gene

<400> 55
ttttaagata tcatgcccgc tggtagcggt ctttgg

36

<210> 56
<211> 39
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in the amplification of the gB gene

<400> 56
ttttaaggat ccctacaggg cgtcgggggc ctcgctctc

39

<210> 57
<211> 39
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in the amplification of the truncated form of the gB gene

<400> 57
ttttaaggat ccctagtggg ccaccttgac cacgcgggc

39

<210> 58
<211> 39
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in the amplification of the modified form of the gB gene

<400> 58
aaaatttcga tatccacctc ggctcggcg acgccccggg

39

<210> 59
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in the amplification of the gC gene

<400> 59
ttttaagata tcatggcctc gctcgcgcgt gcgatg

36

<210> 60
<211> 37
<212> DNA

097644030304

<213> Artificial sequence

<220>

<223> primer used in the amplification of the gC gene

<400> 60

ttttaaagat ctttaaggcc cgcctggcg gtagtag

37

<210> 61

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> primer used in the amplification of the truncated form of the gC gene

<400> 61

ttttaaagat ctttaggggg aggcgtcgta gcgctg

36

<210> 62

<211> 39

<212> DNA

<213> Artificial sequence

<220>

<223> primer used in the amplification of the modified form of the gC gene

<400> 62

aaaatttcga tatccacggc gtcggcacg acgccaac

39

<210> 63

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> primer used in the amplification of the gD gene

<400> 63

aattttgata tcatgctgct cgcagcgcta ttggcg

36

<210> 64

<211> 36

<212> DNA

<213> Artificial sequence

<220>

<223> primer used in the amplification of the gD gene

<400> 64

aattttggat ccctacggac cgggctgcgc ttttag

36

097644-030304
T030304-2449260

<210> 65
<211> 40
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in amplification of the truncated form the gD gene

<400> 65
aaatttttga tccctagcgg tggcgcgaga cgcccggcgc 40

<210> 66
<211> 39
<212> DNA
<213> Artificial sequence

<220>
<223> primer used in the amplification of the modified gD gene

<400> 66
aaaatttcga tatccacctt cccccgcgc gcgtaccgc 39

<210> 67
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF3 gene

<400> 67
cactacgata tcatggctca tcagtgtgca 30

<210> 68
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF3 gene

<400> 68
cactacagat ctttatcgtg atgtactggg 30

<210> 69
<211> 30
<212> DNA
<213> Artificial sequence

096646-00001-2449250

<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF5 gene

<400> 69
ctcacgctcg acatgagatg ttctcacaaa 30

<210> 70
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF5 gene

<400> 70
ctcacctcta gactaggcct cccattgctc 30

<210> 71
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in synthesis of ORF5 gene

<400> 71
cacctcggat cctttgccga tggcaacggc 30

<210> 72
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in synthesis of ORF5 gene

<400> 72
cacctcggat ccttagactt cggctttgcc caa 33

<210> 73
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in amplification of the cDNA of the ORF6 gene

<400> 73
cactcagtcg acatgggagg cctagacgat 30

<210> 74
<211> 30
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of the cDNA of the ORF6 gene

<400> 74
cactcatcta gattaccggc cataacttgac

30

<210> 75
<211> 30
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of the ORF6 gene

<400> 75
cactacggat ccgtgtcacg cggccgactc

30

<210> 76
<211> 33
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in amplification of the ORF6 gene

<400> 76
cactacggat ccttaaacag ctcgtttgcc gcc

33

<210> 77
<211> 30
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of the ORF3 gene

<400> 77
cactacgata tcatggttaa tagctgtaca

30

<210> 78
<211> 30
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of the ORF3 gene

<400> 78
cactactcta gactatcgcc gtacggcact 30

<210> 79
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF5 gene

<400> 79
cactacgata tcatgttgga gaaatgcttg 30

<210> 80
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF5 gene

<400> 80
cactacagat ctctaaggac gacccattg 30

<210> 81
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the synthesis of the ORF5 gene

<400> 81
cactacggat ccgccagcaa cgacagcagc tcc 33

<210> 82
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the synthesis of the ORF5 gene

<400> 82
cactacggat ccttagacct caactttgcc cct 33

097644-0300

<210> 83
<211> 33
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of the ORF6 gene

<400> 83
cacatcctgc agatgggggc gtccttagat gac 33

<210> 84
<211> 30
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of the ORF6 gene

<400> 84
cacatctcta gattatttgg catatttgac 30

<210> 85
<211> 30
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the ORF6 gene

<400> 85
cactacggat ccgtgagtcg cggccgactg 30

<210> 86
<211> 33
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in the synthesis of the ORF6 gene

<400> 86
cactacggat ccttaaacag cttttctgcc acc 33

<210> 87
<211> 30
<212> DNA
<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of the HA g

T03030"2449460

| Parameter | Unit | Value |
|------------------|--------|-------|
| Temperature | °C | 25.0 |
| Pressure | atm | 1.0 |
| Flow rate | L/min | 1.0 |
| Concentration | g/L | 0.1 |
| pH | | 7.0 |
| Time | min | 10 |
| Wavelength | nm | 254 |
| Scan rate | nm/min | 10 |
| Resolution | nm | 0.5 |
| Integration time | s | 1.0 |
| Baseline | | 0.0 |
| Peak area | nm | 254 |
| Peak height | nm | 254 |
| Peak width | nm | 254 |
| Peak position | nm | 254 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |
| Peak width | | 0.0 |
| Peak position | | 0.0 |
| Peak shape | | 0.0 |
| Peak intensity | | 0.0 |
| Peak area | | 0.0 |
| Peak height | | 0.0 |

```
<210> 88
<211> 30
<212> DNA
<213> Artificial sequence
```

<220>
<223> oligonucleotide used in the amplification of the cDNA of the HA gene

```
<400> 88
ctccatcaga tctttaatgc atattctgca 30
```

```
<210> 89
<211> 30
<212> DNA
<213> Artificial sequence
```

<220>
<223> oligonucleotide used in the synthesis of the modified HA gene

```
<400> 89
tccgcggcgcg cacatgctaa caattccaca 30
```

```
<210> 90
<211> 32
<212> DNA
<213> Artificial sequence
```

<220>
<223> oligonucleotide used in the synthesis of the modified HA gene

```
<400> 90
tccgcgggccg cttacattga ttctagtttc ac 32
```

```
<210> 91
<211> 30
<212> DNA
<213> Artificial sequence
```

```
<220>
<223> oligonucleotide used in the amplification of the cDNA of the NA g
ene of the H1N1 strai
```

<400> 91
cacctggtcg acatgaatcc aaatcagaag 30

<210> 92

<211> 30
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used in the amplification of the cDNA of the NA gene

 <400> 92
 cacctgtcta gactacttgt caatggtgaa 30

<210> 93
 <211> 31
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used in the synthesis fo the modified form of the NA gene

 <400> 93
 cactacgaat tcacaaattg ggaatcaaaa t 31

<210> 94
 <211> 30
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used in the synthesis fo the modified form of the NA gene

 <400> 94
 aatttgtgaa ttcgcggccg cggatccggt 30

<210> 95
 <211> 30
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used in the amplification of the HA gene

 <400> 95
 ctgcacgtcg acatgaagac tgtcattgcc 30

<210> 96
 <211> 24
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> oligonucleotide used in the amplification of the HA gene of the H

097644-030004
 T00030-2449260

3N2` strai

<400> 96
gatatctcag atgcaaattgt tgca 24

<210> 97
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the synthesis of the modified form of the
HA gene

<400> 97
caccgcggat cccttcaga aaatggcagc aca 33

<210> 98
<211> 33
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the synthesis of the modified form of the
HA gene

<400> 98
caccgcggat ccttagtctt tgtatcccga ctt 33

<210> 99
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of the cDNA of the NA g
ene

<400> 99
cactcagata tcatgaatcc aaagcaaaag 30

<210> 100
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> oligonucleotide used in the amplification of the cDNA of the NA g
ene

<400> 100
cactcatcta gattatatag gcatgagatc 30

0376443.030303.1

<220>

<223> oligonucleotide used in the amplification of the cDNA of the porcine GM-CSF gene

<400> 105

catatcgtcg acatgtggct gcagaacctg cttctc

36

<210> 106

<211> 37

<212> DNA

<213> Artificial sequence

<220>

<223> oligonucleotide used in the amplification of the cDNA of the porcine GM-CSF gene

<400> 106

catgaccaga tcttcacttc tgggctgggt cccagca

37

037644-080801